

REMARKS/ARGUMENTS

These remarks are in response to the Final Office Action dated June 23, 2004. Claims 1-19, and 21-28 are pending in the present application. Claims 1-19, and 21-28 have been rejected. Claim 19 has been amended to correct a typographical. Applicants respectfully submit that no new matter has been presented. Accordingly, claims 1-19 and 21-28 are pending. For the reasons set forth more fully below, Applicants respectfully submit that the claims as presented are allowable. Consequently, reconsideration, allowance, and passage to issue are respectfully requested.

In the event, however, that the Examiner is not persuaded by Applicants' arguments, Applicants respectfully request that the Examiner enter the arguments to clarify issues upon appeal.

Present invention

A display device comprising a display screen and a pivoting system coupled to the display device is disclosed. The pivoting system allows for rotation of the display screen from portrait to landscape; and for flipping the display from front to back, and for the display device to be folded into a compact form. The design in accordance with the present invention offers a range of freedom of movement not available with previous conventional designs. In a preferred embodiment, the display device 100 can be lifted approximately 130 mm from a flat folded position. A user can rotate the display 90° from portrait through landscape orientations. A user can also flip the display 180° from front to back, which will allow users on opposite sides of a desk to view the same image without turning the display around. All of these features may be used in combination,

allowing the user to take advantage of multiple positioning options. (Summary.) The display device also includes a compression device for facilitating changing a configuration of the display device. The compression device makes changing the physical configuration of the display device quick and easy (Figure 10 and page 6, lines 1-5 of the specification).

Rejection under 35 U.S.C. 103(a)

The Examiner has stated:

Claims 1-19, 22, 24, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun et al. (EP0887724) in view of Chen et al. (5812368) and Bergeron Gull et al. (6189842).

Regarding to claims 1-18, 22, 24, 26, and 28, Braun discloses a display device comprising: a flat display screen; a base portion; a support arm coupled to the base portion and a display screen frame for supporting the display screen; and a pivoting assembly coupled to the display screen for rotating the display screen from a first to second orientation (see drawings). Braun further suggests the display screen can be rotated 180 degrees (col. 2, lines 4-8).

Braun fails to disclose folding the display device into a compact form.

Chen, in the same display field, discloses a display device comprising two parallel support arms (21, Fig. 2) for supporting a display screen; a pin for rotating the display screen; a compression device (pivoting assembly) coupled to the display screen for compressing the display device from and open to a compact form (see figs. 5A-5C and 7B), wherein the compression device having a compression spring (233); and the support arms creates a "Z" shape as the display device is moved to and from a stored position (see figs. 5A-5C and 7B).

It would have been obvious to one ordinary skill in the art to incorporate Chen's display device into Braun's invention because it allows Braun's display device to be folded into a compact form so that the display device occupied less space.

Braun also fails to disclose rotating the display screen from portrait to landscape orientation.

Bergeron, in the same display field, discloses rotating the display screen from portrait to landscape orientation to adjust the width and the height of the display screen (see abstract and column 1, lines 32-38).

It would have been obvious to one of ordinary skill in the art to incorporate Bergeron's rotation means in Braun's invention because of the same purpose as Bergeron uses in his invention, which is to adjust the width and the height of the display screen. ...

Response to Arguments

Applicant argues that Braun, Chen or Bergeron does not disclose "a compression device coupled to the display device for facilitating changing a configuration of the display device" as recited in the independent claims. The

examiner disagrees with applicant's arguments because Chen clearly discloses a pivoting assembly coupled to the display screen for compressing the display device from an open position to a compact position. The pivoting assembly is clearly equal the compression device as claimed. Chen also discloses the pivoting assembly comprising a compression spring (233)

Applicants respectfully traverse the Examiner's rejections. For the Examiner's convenience, independent claim 1 is reproduced in its entirety herein below.

Claim 1

1. (previously amended) A display device comprising:
a display screen;
a pivoting assembly coupled to the display screen, the pivoting assembly allowing for rotation of the display screen from portrait to landscape orientation, for flipping the display from front to back, and for the display device to be folded into a compact form; and
a compression device coupled to the display device for facilitating changing a configuration of the display device.

Applicants submit that Braun, Chen, and Bergeron singly or in combination do not disclose the present invention, including "a compression device coupled to the display device for facilitating changing a configuration of the display device," as recited independent claim 1.

The Examiner has stated that Chen "discloses a pivoting assembly coupled to the display screen for compressing the display device from an open position to a compact position."

However, the pivoting assembly is not the same as the "compression device," as recited in independent claim 1. The pivoting assembly of Chen may "guide" the display device from an open position to a compact position (Figures 5A-5C). However, the arms of the pivoting assembly of Chen must be manually moved by a user, without assistance from any device (Figure 2). Nowhere does Chen teach or suggest a "compression device" that actively facilitates changing the configuration of the display device. An advantage of the compression device of the present invention is that a user can change the physical configuration of the display device with less effort, because the compression device does some of the work for the user (Figure 10 and

page 6, lines 1-5 of the specification). Chen does not provide this benefit, because there is no compression device in Chen.

The Examiner has referred to element 233 of Chen as being a compression spring. However, Figure 2 of Chen clearly shows that element 233 is **not** a compression spring but is instead a **washer**. In fact, column 2, lines 29-30, clearly describe element 233 as a “spring washer.” A spring washer is a disk of metal that is formed in an irregular shape so that when the washer is loaded it deflects, acts like a spring, and provides a preload between two surfaces. In contrast, a compression spring is wound or constructed to oppose spring compression along the axis of wind. Even if element 233 were a compression spring, it still would not facilitate “changing a configuration of the display device.” Instead, it would provide a preload between the washer 232 and the surface of the circular end of the supporting arm (Figure 2).

However, like Chen, nowhere does Braun describe or suggest the compression device as recited in the present invention. Instead, Braun describes a flat panel display device that can be flipped from one position to another position and describes a pivot axis that “passes through or near the center of mass of the display so that [the] display is symmetric about the axis” (column 3, lines 31-47). However, nowhere does Braun describe or suggest the compression device as recited in the present invention.

Finally, Bergeron does not describe or suggest the compression device of the present invention. Bergeron describes a spring 270 (Figure 2b) but the spring is not utilized for facilitating movement of a display but is instead utilized for “preventing undesired tilting of the display” (column 4, lines 46-51). In accordance with the present invention, the compression device facilitates changing the configuration of the display device in a quick and easy manner.

Therefore, Braun in view of Chen and Bergeron does not teach or suggest the cooperation of elements as recited in independent claim 1. Accordingly, claim 1 is allowable over the cited references.

Independent claims 11, 15, and 19

Similar to claim 1, independent claims 11, 15, and 19 recite a “compression device coupled to the display device for facilitating changing a configuration of the display device.” As described above, with respect to independent claim 1, the cited references do not teach or suggest this feature. Accordingly, the above-articulated arguments related to independent claim 1 apply with equal force to claims 11, 15, and 19. Therefore, claims 11, 15, and 19 are allowable over the cited references for at least the same reasons as claim 1.

Remaining dependent claims

Dependent claims 2-10, 12-14, 16-18, and 21-25 depend from independent claims 1, 11, and 15, respectively. Accordingly, the above-articulated arguments related to independent claims 1, 11, and 15 apply with equal force to claims 2-10, 12-14, 16-18, and 21-25, which are thus allowable over the cited references for at least the same reasons as claims 1, 11, and 15.

Conclusion

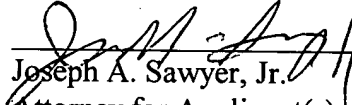
In view of the foregoing, Applicants submit that claims 1-19 and 21-28 are patentable over the cited references. Applicants, therefore, respectfully request reconsideration and allowance of the claims as now presented.

Applicants' attorney believes that this application is in condition for allowance. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted,
SAWYER LAW GROUP LLP

August 17, 2004

Date



Joseph A. Sawyer, Jr.
Attorney for Applicant(s)
Reg. No. 30,801
(650) 493-4540